BEFORE THE PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA

COLUMBIA, SOUTH CAROLINA

SPECIAL COMMISSION MEETING JULY 10, 2013 10:30 A.M.

TRANSCRIPT OF PROCEEDINGS

PRESENTATION BY THE SOUTH CAROLINA

OFFICE OF REGULATORY STAFF

MEMBERS PRESENT: G. O'Neal HAMILTON, *CHAIRMAN,* Nikiya M. 'Nikki' HALL, *VICE CHAIRMAN*; and COMMISSIONERS Elizabeth B. 'Lib' FLEMING, John E. 'Butch' HOWARD, Comer H. 'Randy' RANDALL, and Swain E. WHITFIELD

ADVISOR TO COMMISSION: Joseph Melchers, General Counsel
PRESENTING THE AGENDA: Philip Riley, Advisory Staff

STAFF: F. David Butler, Jr., Senior Counsel; B. Randall Dong, Esq., Josh Minges, Esq., and David Stark, Esq., Legal Staff; Phil Riley, Tom Ellison, and Doug Pratt, Advisory Staff; Janice Schmieding, Clerk's Staff; and Hope Adams and Deborah Easterling, Hearing Room Assistants

APPEARANCES:

C. DUKES SCOTT, ESQUIRE, *along with* ***ALLYN POWELL*** *[Associate Manager, Electric Department / ORS] and* ***GARY JONES*** *[President, Jones Partners Lmt], presenters,* representing the **SOUTH CAROLINA OFFICE OF REGULATORY STAFF**

I N D E X

P R O C E E D I N G S

CHAIRMAN HAMILTON: Please be seated. This is musical chair day. We're trying to get it straight one more time.

We'd like to call the Commission meeting order, the special meeting, and ask you, if you would, please bow for a moment of silent meditation.

[Brief pause]

Amen.

Mr. Riley?

MR. RILEY: Mr. Chairman and Commissioners, the sole item on this Special Commission Agenda is to hear from ORS about the construction update for the Summer Units 2 and 3.

CHAIRMAN HAMILTON: Thank you.

Mr. Scott, welcome.

MR. SCOTT: Thank you, Mr. Chairman and other Commissioners. We appreciate the invitation to be here today. When they told me I could speak yesterday, I got so excited I put on a church suit for you. It's not a $1500 suit, Commissioner Howard, but it's the best I got.

[Laughter]

There are those who say, under the Base Load

Review Act, that the risk is transferred from the shareholders and utilities to the customers. There's no doubt that the Base Load Review Act does reduce the risk to the shareholders and the customers, but it's not transferred directly to -- excuse me. It lowers the risk for the utility shareholders and the utility, but it does not transfer the risk directly to the customers, because they place a great responsibility to protect those customers on you, the Public Service Commission. You are what is between -- and I ain't telling you nothing you don't already know. I'm speaking more for the crowd out there than y'all. But y'all are responsible and have the authority and are the ultimate decision-maker to ensure that the risk that is reduced to the shareholders is not unreasonably borne by somebody else.

It is ORS's responsibility to you to make sure you can do your job. It's our responsibility to monitor, to review, to audit, and -- as, Commissioner Hamilton, you brought out in your questioning -- to be there, to determine whether there's something you need to know so you can do your job. Our responsibility's to you; you have the ultimate responsibility.

We take our responsibility to you very seriously. We want to do a good job for you. This presentation is a wonderful way to do it. And we do -- we file that quarterly report and put it on our website, and we file annually with you, but being able to come talk to you is very much appreciated.

I will tell you today -- and you're going to hear some challenges, and you heard about some challenges that the company told you about, with the construction of these units. I mean, you can imagine constructing two nuclear units for the first time in South Carolina, within the borders of South Carolina, I guess, since the Catawba -- which, Commissioner, I know you're familiar with -- came on. And, of course, Brunswick has come after that, but that was actually built in North Carolina. You can imagine that there are some issues. If anybody's ever had a house built for them, or a room added on, or renovations to a house, know that issues come up in construction that you didn't know about. It's got to happen with the nuclear -- when you build two nuclear plants at $6-$10 billion.

But what we're here today to tell you -- and

Gary and Allyn are going to give you the nuts and bolts. But today I would say to you that, based on what we know as of yesterday -- nothing's changed today; we just haven't learned anything today, while we've been working on this. But as of what we knew yesterday, as long as the company continues to build these units in accordance with your orders, the budget that you have approved -- as amended -- the schedules, and the other parameters, that it is prudent to continue with those units. You're going to hear some challenges, but they're not challenges that we feel can't be met. If we find an issue, we'll certainly be back to you. And we hope that you find this sufficiently informative to you that you'll ask us back maybe periodically, to give us a chance to do that. But as of today, my statement is true.

We meet with company representatives monthly at the offices, where they come in, and they go over things that Gary and Allyn has found, and audits things. I find the people that we meet with from SCE&G and SCANA -- and I don't see any of them that I'm talking about, necessarily, here today. But the people out there at the plant, the construction managers and procurement managers and

the financial people are competent; they are knowledgeable; they care. You can get a lot of knowledgeable and intelligent people, but finding them that care, too? They do care, which gives us comfort.

Now, we also know that we can't just rely on that because there's things that happen. You know, this is a modular build. It's kind of like they used to build the old Jim Walter homes -- some of you may not remember Jim Walter homes, but "A dollar and a deed is all you need," was the advertisement.

[Laughter]

But it was built somewhere else and brought in and put together. And that's -- you'll hear about modules in this thing. And some of that is beyond the people I'm talking about's control, but they work at it, they keep on, they visit, and we think those issues and those challenges can be resolved.

But I'll sit down now and let the people who know what they're talking about talk. But what I've told you, I think I know that part of it, anyway. Thank you, very much.

CHAIRMAN HAMILTON: Thank you, Mr. Scott.

MS. ALLYN POWELL [ORS]: I'm going to go put

the presentation up on the --

CHAIRMAN HAMILTON: All right. Very good.

[Brief pause]

[Reference: PowerPoint Slide 1]

MS. ALLYN POWELL [ORS]: Good morning, Mr. Chairman and members of the Commission. My name is Allyn Powell. I'm associate manager in the Electric Department with the Office of Regulatory Staff. I'm primarily responsible for the review of the construction at V.C. Summer Units 2 and 3.

With me is Gary Jones. Gary is the president of Jones Partners, and he is our consultant for new nuclear issues.

We're going to start out today talking a little bit about what ORS does to monitor the construction of the units on a regular basis. Then we're going to discuss the major construction activities that have been completed in the last six months. Gary will go over some issues ORS has identified as construction challenges, and then I'll talk a little bit about things that have emerged in the past month to six weeks.

[Reference: PowerPoint Slide 2]

This is a picture of our ORS staff on the site visit we made in June. Behind us you see a

trailer; that is where our offices on site are located. This is where we meet with company officials and review documents.

[Reference: PowerPoint Slide 3]

Dukes mentioned a little bit about what we do to review activities on site. We visit and observe construction activities. We tour the construction site by SUV. We get out and walk around for a closer look at places where we need to do more detailed observations.

We walk through the module assembly building where the modules are being assembled, to view the progress there. We also periodically tour warehouse areas where many of the components are stored.

We meet on site with SCE&G project leads in the areas of engineering, construction licensing, quality assurance, and operational readiness, on a regular basis. We review documents associated with the construction of the units, from the minutes of project meetings to schedules from Westinghouse to NRC documents.

We also have monthly management meetings with ORS staff in Columbia, where SCE&G project leads and ORS management have the opportunity to discuss

any issues that we've found in our review. These meetings include quarterly appearances by the Westinghouse project lead. We also meet with representatives of Westinghouse, as necessary, to discuss specific issues. For example, on Monday, we were talking with them about the schedule.

We also review and assess SCE&G's quarterly reports. We review invoices associated with the project. We track, especially closely, payments associated with the Base Load Review Act milestones to ensure they're being made in accordance with the EPC contract.

We participate in NRC public meetings on issues related to the units, and we also provide testimony to the Public Service Commission, as requested.

So, we've talked a little bit about what we do. What are some of the major activities that have occurred in the last six months? I know SCE&G recently gave you an extensive photo presentation, so I'm just going to hit a few of the highlights of what ORS feels are the major accomplishments.

[Reference: PowerPoint Slide 4]

The first was the Unit 2 nuclear island basemat pour, which was completed March 11, 2013.

In this picture, you can see the nuclear island outlined. The circular area in the middle is where the containment vessel will go.

This was significant for more than just being the first nuclear concrete poured in 30 years. There were a number of licensing challenges associated with the basemat pour that the company managed to successfully overcome.

[Reference: PowerPoint Slide 5]

This slide shows the progress on the turbine building. Significant progress has been made in this area, as well. The walls of the turbine building are approaching grade level. In the background, you can see the condenser. The condenser will be placed inside of the turbine building. The middle segment of the condenser, called B, will be the first segment set. That's going to happen in the next few weeks, and it's something that we're watching pretty closely right now.

[Reference: PowerPoint Slide 6]

This picture shows the placement of the containment vessel bottom head inside of the CR10 module.

This would be a good time to stop and talk

about the modular construction process. What is a module? A module is a prefabricated structure that is assembled outside of the excavation and then lifted into place. It's different from traditional construction where most of the components are put together in the final place where they will sit.

There are many modules that make up the AP1000 unit, and they are being constructed at various places, from CB&I Lake Charles, to Pegasus Steel, to modules being built on the site. They range from small modules that act as sumps, to large modules the size of entire buildings.

CR10, which is the module here, acts as a cradle to hold the containment vessel. You can see it above the nuclear island basemat and below the containment vessel. Concrete will be poured in and around the CR10 module to fix the containment vessel bottom head in place.

[Reference: PowerPoint Slide 7]

Significant progress has also been made on the cooling towers. This shows Cooling Tower 2A. It's at its final height, though still under construction. All the cooling towers are progressing well. Cooling Tower 2B was slightly delayed due to the need for a wetlands permit, but

piles have been driven and the concrete basemat has been poured for that cooling tower. So it is quickly catching up to the others.

[Reference: PowerPoint Slide 8]

Another significant milestone was the completion of the electrical switchyard. It was declared substantially complete and was energized during the quarter.

The next major project milestones that ORS is looking out for are the basemat pour of the Unit 3 concrete on October 1, 2013; the Unit 2 CA20 module, which is supposed to be set sometime in October 2013. CA20 is one of the largest modules. It partially makes up the walls, floors, and rims of the auxiliary building, which is one of the six buildings that comprise the nuclear island.

[Reference: PowerPoint Slide 9]

The way that we quantify progress is by looking at the BLRA milestone schedule. The milestone schedule was part of the Base Load Review Act Order, and we track these activities on a monthly basis.

At the end of the first quarter -- which is the last official tracking data that we have, because we get it at the end of the quarter -- 84

milestone activities had been completed; there were 62 milestone activities yet to be completed. During the quarter, six milestone activities were scheduled to be completed; three of those were completed, but three were not. And there were two milestone activities that were delayed ten months or more.

ORS calls milestone activities delayed ten months or more "caution milestones," and those are subject to additional monitoring.

[Reference: PowerPoint Slide 10]

The current approved base project cost in 2007 dollars -- and I should stop to say that all the numbers you see here are 55 percent SCE&G numbers; it doesn't include Santee Cooper's portion. The current approved base project cost in 2007 dollars is $4.548 billion, per the most recent Commission Order. No additional change orders have been approved since then. The amount spent on the project as of December 31, 2012, was $1.773 billion.

Gross construction cost estimates are currently trending about $11 million above the estimates from the most recent Order. That is because of increases in escalation and AFUDC.

So we've talked about the major milestones. We've talked a little bit about the schedule and a little bit about the budget. Gary is going to talk about something we call construction challenges. These are significant issues that we monitor regularly each month. And I'll give it to Gary.

MR. GARY JONES [ORS]: Good morning, Mr. Commissioner -- Mr. Chairman and Commissioners, and the public. I'm going to talk about some of the specific construction challenges that are faced.

[Reference: PowerPoint Slide 11]

I think the construction of the entire plant is a challenge, in itself, but these are ones that deserve some special considerations and ones that we are monitoring closely.

The first deals with what are called the structural modules. These modules will comprise the building that actually holds the containment vessel, and inside the containment vessel is the reactor vessel and other components of the nuclear power plant. But these modules are the ones that actually form the support for the containment vessel and surround that. They're basically the building that surrounds the containment vessel.

There have been significant challenges -- both

quality and schedule challenges -- relative to these modules. These started to be manufactured by Shaw SMS. Since Shaw was purchased by CB&I and they took over that facility, it's now referred to as CB&I Lake Charles. It's in Lake Charles, Louisiana. They have now assumed responsibility for this facility, and we've seen some progress there and some major changes associated with a better approach to getting these modules on site and improving the quality. But the quality issues have ranged from some welding that was not in compliance with the original design basis to documentation issues that have prohibited the shipment or resulted in holds when the components arrived on site.

This is the most significant challenge to the project right now. It's the thing that is most impacting the schedule, to get these modules on site so that -- they're actually sub-modules; the modules themselves are then built from the sub-modules that come from this facility, and then once they are completed on site, they are put into the excavation to form the building. But these are the most significant challenge that the project currently has.

There's been a lot of management attention, both from SCE&G, Westinghouse, CB&I, to try to improve the schedule. There has been recent improvement. They are starting to meet their delivery dates. But there's going to have to be some sustained and reliable demonstration that this is going to continue, before this is an issue that we can say is totally resolved.

Similarly, the shield building modules, these were taken over about a year ago. These were reassigned from the Shaw facility to Newport News Industrial, a major manufacturer who's well known in the nuclear Navy and in the nuclear generation area. None of these shield building modules -- and this is actually the building that goes on the outside of the building that we just talked about, so you'll -- this is really what you'll see when you see the plant from the outside, once it's completed. But these shield building modules, they are even more complex than the structural modules that we just discussed. They are curved; they have a lot of interior complications, complex design, to them. They are probably more difficult to fabricate and to erect. Again, none of these have yet been delivered on site, and none have actually

been scheduled to be on site, but they remain a concern of ours, also, to ensure that we don't have similar problems as the structural modules have.

We have some confidence that NNI, which is Newport News Industrial -- with the track record they have, there's reason to be more optimistic. And so far, the fabrication planning and execution has gone well. Again, there's going to have to be sustained and reliable performance on both the delivery and the quality of these shield building modules before we can have confidence that they're not going to be a major obstacle to meeting the project schedule.

Kind of associated with these issues, and also associated with the delay that was on the nuclear island basemat, are overall structural design compliance issues. And the example of this was the T-head reinforcement that delayed -- that had to be resolved before the nuclear basemat -- nuclear island basemat could be poured. But these same issues have kind of moved up through the walls of the other buildings, and the issues of compliance with the licensing basis and compliance with codes and standards is an issue here.

Westinghouse has added to their staff some of

the leading architect engineers to assist them in finishing off the calculations and design for these. Again, that brings some reason for optimism. Currently, they're staying ahead of the construction with the fixes that are required for this, and with the licensing amendments that are required to address these issues. But, again, there's going to have to be some sustained performance on these issues, also. These issues are basically code and standards compliance, and licensing compliance issues that we're talking about.

Instrumentation and control design on this plant is a digitally-based instrumentation and control system, an advanced control system, that the design has had issues through the licensing process, and through delivery of the design documents it's been problematic.

One of the major issues associated with this is the completion of the plant reference simulator, which must reflect the final I&C design, and which is used to train the reactor operators when they start to operate the plant. And that, right now, is one of the critical paths on the unit, is to make sure that the operators are trained in time to

operate it; and the plant reference simulator has to be in place in order to support that; and the I&C design has to be in place, to support that. Currently, the schedules support the need date for the plant reference simulator and the construction, but there's very little room for margin there, and it still remains a concern both to the project and to ORS in the I&C area.

The other issue is the overlapping between Unit 2 and Unit 3. As delays occur on Unit 2, we become more concerned about how that's going to impact the second unit and the construction of that unit and the design of that unit.

The major area, again, is in the structural module delivery. The shop has just so much capacity, and they need to complete the Unit 3 modules on -- as currently planned, they'll need to complete -- I'm sorry, the Unit 2 modules -- before they start on Unit 3. So this is an issue that has some implications for the spacing between Unit 2 and Unit 3, and whether the schedule for Unit 3 can be met.

Currently, there's really no final schedule for Unit 3. And that's -- and one of the major reasons for that is that they don't have a schedule

for the completion of the structural modules for Unit 3. We have that now for Unit 2, but not for Unit 3. So this will remain an issue, both for the project and for ORS, an issue of concern, to get a Unit 3 schedule that supports the Unit 3 construction.

You may know that this plant is being sourced globally, which means that major components are being built all over the world. And the world financial situation, various events like the tsunami in Japan, shipping, all these issues contribute still to having an issue that needs to be carefully looked at relative to major equipment coming in.

Financial issues have been of concern. In some cases, companies have just gone out of business. A recent example was associated with a fuel transfer tube, which is an important component, not really a sophisticated major component, but the company -- basically, the owner died, and they decided they didn't want to be in business anymore. So that now has been transferred -- the responsibility for producing that has been transferred to another company, and, so far, that supports -- the new delivery date -- supports the

construction schedule and need date for that. But this remains a source of concern for all, is that the global resourcing of components from all over the world is somewhat problematic. There is a lot of major -- there are a lot of major components on site now, so they have received a lot of the major equipment, and hopefully this will continue.

Kind of related to many of these same topics is license amendment requests. This is when you deviate from your license that the NRC has granted, you have to submit a license amendment request, which they then have to review in detail. And the level of review that these are getting is somewhat -- I mean, it's been greater than was anticipated. The number of licensing amendment requests and the review process has been of concern.

Right now there's about 58 of these that are planned. The plan right now supports the construction schedule, and the allocation for the NRC review time is part of that plan. But this remains a potential point of conflict, to identify, submit, and get approved all of these license amendment requests prior to the construction activity actually having to be done.

So these are all construction challenges for

the project. We've seen plans that address all of these, but we felt these were issues that were important enough to bring to your attention so that you're aware of them. Thank you.

MS. ALLYN POWELL [ORS]: Thanks, Gary.

[Reference: PowerPoint Slide 12]

I'm going to talk a little bit about some emerging issues that have happened since the end of the first quarter, and in the past couple of weeks. The company was in here and they talked about the delays in their construction schedule. The latest schedule that Gary and I have seen shows a substantial completion date for Unit 2 in December of 2017. Unit 3 is likely delayed by similar amounts, nine months to a year. As Gary mentioned, we don't have a complete Unit 3 schedule yet, like we do for Unit 2. That's something that they're working on. I asked the company when they thought they would have that, and they said probably within the next three months. So we'll be looking forward to getting that soon, as well.

SCE&G estimates the potential budget impact from delays to be approximately $200 million. And ORS expects SCE&G to contest its responsibility for the cost of these delays.

[Reference: PowerPoint Slide 13]

Another emerging issue is related to the BLRA milestone schedule. Along with the extension of construction by 12 months, there's going to have to be a lot of resequencing of construction activities -- doing things in a different order -- to try to accommodate the later delivery of the modules. Official second-quarter-of-2013 data isn't available yet. At the end of the first quarter, two milestones were tracking delays of ten months or more. Preliminary data from the second quarter is showing us that 15 milestones are tracking delays of ten months, which is a substantial increase, and it's, in part, due to that shifting around of the construction schedule to try to accommodate the later delivery of the modules.

There is one milestone that is now tracking a 17-month delay. If you'll recall, the Base Load Review Act allows 18 months before a hearing would be triggered. It's ORS's practice to notify the Commission if a milestone is delayed more than 16 months, and once we have the official documentation, we will send a letter to the Commission regarding this milestone.

[Reference: PowerPoint Slide 14]

Another emerging issue has to do with the number of outstanding change orders. A change order is the way that the company and the consortium agree to make changes to the project budget or schedule.

Change Order 16 has not yet been executed. Change Order 16 incorporated many of the changes that were approved in the last hearing, including the movement from Handy-Whitman inflated to more of a fixed price for a number of components. And it just hasn't been executed for a long time. It's been out there for over a year now.

The review time for change orders is increasing. There are three change orders that have been under discussion for over a year, with no resolution at this point. The number of potential issues that are being identified that may lead to change orders is also increasing. And that's just something that we wanted to highlight, and that's something that ORS is going to be looking at very closely as we go forward.

[Reference: PowerPoint Slide 15]

Our conclusions from the presentation: Major progress has been demonstrated in the first half of the year. There are still significant challenges,

but actions to address these challenges have been identified and implemented. We're going to need to see sustained progress in these areas over the next few months, and we're going to be looking at that very closely. Currently, it appears the project can be completed within the criteria established by the Base Load Review Order, as amended.

[Reference: PowerPoint Slide 16]

And Gary and I would be happy to take any questions you may have for us.

CHAIRMAN HAMILTON: Thank you, very much, for your presentation.

Commissioners, do you have any questions? Commissioner Howard?

COMMISSIONER HOWARD: Good morning. Thank you, very much, for that presentation. I enjoyed it and it was quite enlightening. And I guess I feel somewhat safer knowing that you all are on the site also. Correct me if I'm wrong, but do y'all have somebody there full-time on the site? Does ORS have a full-time person on the site?

MS. ALLYN POWELL [ORS]: We don't have someone full-time at the site.

CHAIRMAN HAMILTON: Okay. I was --

MS. ALLYN POWELL [ORS]: No.

CHAIRMAN HAMILTON: -- just curious. I guess it would be -- Ms. Powell, I guess this would be your question. With where we are now with the construction at the site, how is this viewed by Wall Street or the investment community? I mean, are they getting leery? Are they comfortable? Those are my -- that's my question.

MS. ALLYN POWELL [ORS]: I don't know that I can really comment on that. I'm not usually involved in sort of assessing Wall Street's reaction. I think that there didn't seem to be --

CHAIRMAN HOWARD: I think Mr. Scott's going to save your life.

MS. ALLYN POWELL [ORS]: Yeah.

[Laughter]

MR. SCOTT: Based on my conversation with Wall Street and with the people at SCANA, Wall Street is very confident in this Commission and this process and in SCANA. They very much like the Base Load Review Act.

So, I would say that they understand that we're talking about a lot of money -- we're talking about virtually doubling SCE&G's retail rate base -- but they're confident that, with the Base Load Review Act, that their investments can produce a

return to them. So I think Wall Street understands the complexities, as we do, and as you do, but with the Base Load Review Act and with the regulatory environment in South Carolina, I think they're confident.

COMMISSIONER HOWARD: Okay. I guess, Mr. Jones, this might be your question. In the contract -- and I guess you could argue that I should know it, but what kind of weather clauses do you have for weather delays? I mean, a week? What was the contract? We've had, obviously, some bad rainy weather lately. Does that have an impact on the construction schedule?

MR. GARY JONES [ORS]: We discussed this issue with the construction people on site and, frankly, they indicated that it hasn't had a major impact. The worst impact they have is lightning. When there's a thunderstorm with lightning, they essentially have to clear everyone from all construction activity and shut down the site. But it has been -- there have been some impact, but it's been relatively minor. They accommodate the rain by being able to -- they've got pumps on-site that pump out any of the surface water that is there. It does, in some cases, impact concrete

pours, but it has not done so to any major extent, so far.

COMMISSIONER HOWARD: Are we within the weather clause range of the contract? I mean, is there six months or five days -- whatever the case may be -- for weather delays?

MR. GARY JONES [ORS]: I'm not aware of any specific weather delays. They have provision in the contract for various acts-of-God type clauses. But I don't think we're outside the range of what they've allowed for, so far, thus far.

COMMISSIONER HOWARD: All right. Thank you. And excuse me for memory slack, but it seems like you had 62 milestones that had not been completed yet. Out of that 62, just the arithmetic I had done, something like 14 or 15 are now subject to delays, which is roughly 25 percent. With your construction experience, is this a fair number? I mean, to me, I question 25 percent of the 62 remaining milestones being in delay. Is that a fair question?

MR. GARY JONES [ORS]: I think it's a fair question. I think the aspect that we look at: Are they, in fact, going beyond the allowance of the 18 months, and do we expect that they will continue to

go beyond that? And, thus far, the answer is, no, we don't expect them to go beyond that.

We are concerned with the delays. I mean, there's no doubt about that. Some of the delays that have been -- I think one of the largest ones we're talking about was the delay on the pouring of the nuclear island basemat, and that was a major concern to us, and the issues that were advanced there relative to lack of compliance with the licensing basis. So those did cause concern. We saw good actions to try to recover that.

And then, of course, the biggest issue we're talking about now -- the biggest challenge that we have -- is the structural modules. And we're seeing some progress there, and hopefully that's going to be turned around also.

We've seen changes in -- as Allyn alluded to -- changes in the construction sequence, the way they're going to handle things. There have had to be some, what we call, work-arounds where you do things differently than would be ideal. But we are seeing them plan and execute these areas to try to recover as much of the schedule as they can. We are concerned; we are not panicked at this stage, I would say.

COMMISSIONER HOWARD: Well, along that line, if a particular milestone is behind schedule, are there three shifts at everything? Are you working 24 hours a day on this project? Are there three shifts, or is there time for over- -- is there an allowance for overtime to sort of catch back up?

MR. GARY JONES [ORS]: You're talking about for us?

COMMISSIONER HOWARD: Yeah, I'm talking about for the project.

MR. GARY JONES [ORS]: Oh

COMMISSIONER HOWARD: I mean, any of the milestones behind.

MR. GARY JONES [ORS]: You're not talking about for ORS. I'm sorry.

COMMISSIONER HOWARD: Pardon?

MR. GARY JONES [ORS]: You're not talking about ORS, you're talking about the --

COMMISSIONER HOWARD: Oh, no, no, I wouldn't dare talk about ORS.

MR. GARY JONES [ORS]: To my knowledge, they are currently running two shifts. In some instances, they're running three shifts. For example, in the MAB facility -- the module assembly building -- they're running three shifts there, I

believe, to make the repairs on the welds on the modules that they have in place.

But they are -- there is shift work involved, but so far, it's not three shifts 24 hours a day.

COMMISSIONER HOWARD: Well, would you and ORS -- or, I guess, SCE&G -- have the authority to ask them to go to a third shift to sort of relieve some of the back-pressure on this -- these delays?

MS. ALLYN POWELL [ORS]: ORS doesn't really have the authority to order the company to do something. But we do monitor what they're doing. And I will say the reason you're not seeing a lot of three shifts on site is because the delays right now are being driven by the structural modules. They are being manufactured at CB&I Lake Charles. And so I feel confident that the site would be working if they had something to work on, but the thing they need to work on has to be delivered to them.

COMMISSIONER HOWARD: That makes sense.

MS. ALLYN POWELL [ORS]: So that's why you're not seeing a lot of three shifts right now, with the delays.

COMMISSIONER HOWARD: Well, I guess I was curious, and when SCE&G made their presentation I

asked a question about the welds, the full-penetration welds. And the way that I read the testimony, it was that there was obstruction available -- there was some obstruction that caused them to have to replace or reposition the welds, if I'm not mistaken -- and I very well could be, from the look on your face. But I guess, to my way of thinking, this is a design and construction contract. It's hard for me to understand how somebody could design something, do the engineering design work, and then they get to the construction and they say, "Oh, there's a problem here that we have to delay." It would seem like, in the design engineering process, even before the construction, those questions would have been resolved. I mean, do you -- could you comment on that?

MR. GARY JONES [ORS]: I can agree with you that we would have hoped that these issues would have been resolved prior to construction and to the fabrication process. We've been involved in the -- there have been root-cause analyses that have been done relative to this issue that you're discussing, the welds, and, you know, why this happened.

In the design and fabrication process, oftentimes, there are changes to the design driven

by the ability of the fabricator to actually perform the work, as designed. Sometimes you just can't do it. The clearances aren't there that you need to get your weld rod in, to do a certain type of weld, or that. Or it's actually uneconomic to do it; it's going to take way too long, be way too expensive to do it. So there's iterations that happen between the design and the fabricator, and this is happening now quite frequently with Newport News Industrial.

What should happen is that they get factored back into the design and evaluated by the designer, and are acceptable, and that they also comply with your licensing basis, that what you told the Nuclear Regulatory Commission you were going to do was actually done. Or, if it hasn't been done, you've identified it to them and filed a licensing amendment to do that.

It was somewhat disappointing to find that that step had not happened, that changes had been made that were not factored back into the design process and did not necessarily apply to the licensing basis of that design. And that is what I alluded to, that they are now getting ahead of that process in the walls. They're having other

engineers go through the design of these, complete the calculations and ensure they're in compliance with the design basis. And, in fact, they launched an entire program -- it was called C2LB, and it was "compliance to licensing basis," so that they're looking at all their designs to ensure that they comply with the licensing basis of the plant. So that's something that now has gotten in front of the construction and fabrication process. So that's why we feel somewhat better assured about it than what happened on the basemat and what happened on the structural welds.

COMMISSIONER HOWARD: I was curious about change orders and that it could take up to a year to implement or get a change order approved. I guess -- well, I guess -- I'm sure you do concern yourself with the criticality of the change order. If it was just changing something from red to blue, then y'all wouldn't initiate a change order. But it just seems to me that that's a long time. It seems like we went through a whole process of construction, engineering design, and everything, in the original hearing, and I question -- because of lay and ignorance -- I question the number of change orders, and why it would take a year to get

a change order approved, and what kind of impact would that have on the overall construction schedule. And the basic question: Are these change orders necessary?

MS. ALLYN POWELL [ORS]: I think that one of the reasons it's been taking longer to approve change orders in the last year is that with CB&I's acquisition of Shaw, there's been a lot of turnover. And so a lot of the people that they were negotiating with left, and then they had to start negotiations over with new people. Even people that were retained after the merger were assigned to different places. Tom Sliva, who was the Westinghouse project lead, unfortunately, passed away, and so there have been a lot of factors that have been complicating that process. And I can understand why it's taken a little bit longer, but it is concerning that they are starting to pile up. I will say that the change orders that are -- the major change order is Change Order 16, which incorporates a lot of the changes from the last hearing. The company and the consortium have an agreement that has allowed them to proceed with construction. So they're able to proceed without the change order, but that clearly is not an ideal

situation.

The other change orders are coming because of things that have come up during the construction process. For example, one of the pending change orders has to do with the Health Care Act and Westinghouse's portion of the Healthcare Act costs for their employees. And so that's something that was unforeseen and they've been trying to work through that and how much that's going to cost.

COMMISSIONER HOWARD: Wait a minute, I've got to interrupt you.

MS. ALLYN POWELL [ORS]: Okay.

COMMISSIONER HOWARD: We are faced with construction delays because of a health care issue?

MS. ALLYN POWELL [ORS]: It's not -- that isn't a construction delay. I'm just saying, that's a change order that's been out there --

COMMISSIONER HOWARD: Oh, okay.

MS. ALLYN POWELL [ORS]: -- for a long time.

COMMISSIONER HOWARD: I'm with you. I'm sorry, okay.

MS. ALLYN POWELL [ORS]: No, no, no.

COMMISSIONER HOWARD: Okay.

MS. ALLYN POWELL [ORS]: No, not a construction delay.

There are other items that -- cybersecurity, which we talked about that in the last Base Load Review Act hearing, that's another change order that's still outstanding. The company and Westinghouse are trying to negotiate over the system and what was provided for in the original contract, and what it will take to meet new NRC requirements. And, you know, that's a change order that's taken awhile to negotiate. They do still have some time, but at a certain point you need to start buying equipment and putting systems in place. So it does need to get resolved. It's not critical at this point, but it's something we're watching.

COMMISSIONER HOWARD: Okay. That's it. Thank you, very much. I really appreciate the presentation and your answers. Thank you.

MS. ALLYN POWELL [ORS]: Okay.

COMMISSIONER HOWARD: I feel a lot better now.

CHAIRMAN HAMILTON: Commissioner Fleming.

COMMISSIONER FLEMING: Thank you, Mr. Chairman.

Good morning. I really appreciate your giving this update on the construction site as it is. Talk to me a little bit about the milestones. You

said that, right now, there are two that are ten months overdue, and -- but I believe you said 17 that are -- that could be, when this report is issued?

MS. ALLYN POWELL [ORS]: At the end of the first quarter, which was the last sort of official report that we got from the company, there were two milestones that were delayed ten months or more. Since then, the company has announced the construction delay. The company has worked with the consortium to sort of redo the schedule to try to work around the module segments coming in later. And part of what's happened is that a number of the milestones have been pushed out farther.

The exact number I had was 15 milestones are currently tracking delays of ten months or more -- and this is preliminary -- and there's one milestone that is tracking a 17-month delay. That is included in the 15.

COMMISSIONER FLEMING: And so what exactly are these milestones? I mean, specifically, like what are the two milestones specifically that are ten months out, at this point?

MS. ALLYN POWELL [ORS]: The two that were ten months out, one had to do with integrated -- the

integrated head package. I'd have to look at the second one [indicating].

MR. SCOTT: I may need to interrupt a minute. When you say "ten-month delay," you're not saying ten months beyond the 18 months; they're still within the Order of the Commission. Is that right?

MR. GARY JONES [ORS]: Yes.

MR. SCOTT: They're not --

COMMISSIONER FLEMING: I --

MR. SCOTT: -- ten -- okay.

COMMISSIONER FLEMING: I understand that. I think there is one, though, that's getting close to the 18 months, right?

MR. GARY JONES [ORS]: It is, yes.

COMMISSIONER FLEMING: But you -- if it's ten months out, from what I understood, it causes ORS great concern.

MS. ALLYN POWELL [ORS]: We start reviewing it much closer. And the closer it gets to 18, the more concerned we become.

The two that were at ten months at the end of the first quarter, one was the shipment of the integrated head package to site -- the integrated head package sits on top of the reactor vessel -- and the other one was the reactor coolant pump

fabricator delivery of casings to the port of export.

COMMISSIONER FLEMING: And are these associated with Lake Charles?

MS. ALLYN POWELL [ORS]: No, those two are not --

COMMISSIONER FLEMING: Because we keep --

MS. ALLYN POWELL [ORS]: -- associated with Lake Charles.

COMMISSIONER FLEMING: -- hearing that the Lake Charles facility is a major holdup, which I understand. But, so these milestone delays have nothing to do with the Lake Charles facility.

MS. ALLYN POWELL [ORS]: Those two do not. There's a --

COMMISSIONER FLEMING: So could you explain a little bit about what's causing those type of delays, as well?

MS. ALLYN POWELL [ORS]: Well, the reactor coolant pump fabricator delivery of the casings, they had to rework one casing. I will say that the completion date of that milestone is within the next two or three months, so it's very close.

And the other one, the integrated head package shipment to site, in the process of doing all these

reviews they discovered that they needed to make some design changes. However, it's very high up in the construction; it's not something that you would need at this point.

COMMISSIONER FLEMING: Well, I guess, it's -- what I was hearing, which was not really correct, was that it was the Lake Charles facility that was really the main cause of the milestone delays, but it's lots of the vendors -- it's multiple vendors, I should say.

MS. ALLYN POWELL [ORS]: I would say that the cause of delays to the critical path, which is, you know, what's the component that keeps you from moving forward --

COMMISSIONER FLEMING: Is Lake Charles.

MS. ALLYN POWELL [ORS]: The component that keeps them from moving forward is CB&I Lake Charles. That's the critical path.

COMMISSIONER FLEMING: Is that the one that's at 17?

MS. ALLYN POWELL [ORS]: It is a module that's at 17. It's CA03.

Was CA03 given to someone else and moved from CB&I Lake Charles?

MR. GARY JONES [ORS]: Yes. It's going to be

done by Pegasus.

MS. ALLYN POWELL [ORS]: CA03 was originally a module constructed by CB&I Lake Charles. In an effort to catch up, it was taken away from them and given to a different fabricator. But it's not necessarily the fabrication of it that's delayed right now. It is the fact that it has to be put on in a certain sequence, because one of the containment vessel rings supports the module. So you have to have that containment vessel ring set before you can put that module in place.. Before you can set the containment vessel ring, you have to have CA01, which is the module that's currently on the critical path from CB&I Lake Charles. And so everything that depends on that containment vessel ring being set is being delayed by that one module. So that's kind of how you start getting farther out.

COMMISSIONER FLEMING: Okay. I want to come back to that vendor question --

MS. ALLYN POWELL [ORS]: Sure.

COMMISSIONER FLEMING: -- in a minute, but I wanted to ask you about the simulator, the training. Now, you said there were problems there. There were concerns about the timing. Could you go

into a little bit more detail about that?

MR. GARY JONES [ORS]: The plant simulator is structured to simulate the control room, essentially, the main control room, and what the operators are going to have to deal with in the control room. And, in fact, it simulates the operation of the plant. It can simulate an accident, for example, and the instruments that track that will track the way that the plant would respond to that. So the plant reference simulator has to have, essentially, the final design in place, and especially the instrumentation that's going to tell the operators what's going on in the plant. So that's why it's such an important thing.

And the lead time to train operators to be ready to operate the plant when it's complete is significant. It takes a long time to train nuclear plant operators. So you back all that up, and the plant reference simulator has to be available much earlier than, you know, just casually you would think it has to be, because the operators have to be trained on that simulator and go through their training process, pass the test on that, and be ready then to operate the plant at that time. So it backs up the whole schedule. So, plant

reference simulator has to be available to train the operators; the I&C design has to be ready to support the plant's reference simulator. So that's how this thing gets backed up to the point where it becomes critical.

COMMISSIONER FLEMING: And where are we now in that process, ai what I'm --

MR. GARY JONES [ORS]: I'd have to look at exactly when the plant reference simulator is going to be delivered.

COMMISSIONER FLEMING: So the simulator is not in place yet, for them to train.

MR. GARY JONES [ORS]: There is, they call it, a limited scope simulator in place, so some of the operator training is occurring.

COMMISSIONER FLEMING: But it's a very limited amount.

MR. GARY JONES [ORS]: I wouldn't say "very limited," but it's not the final. It's a pretty extensive simulator that they have in place -- in fact, two of them. And they're doing -- they have to do what they call gap training. So the operators will go through their training process on the limited scope simulator, and then the gap training will address between -- the issues that

happened between the limited scope simulator and the plant reference simulator. And so that training will have to occur.

We have the date for the plant reference simulator when it's to be delivered. I don't know it off the top of my head, but currently, that date supports the training needs of the operators. I can tell you that. I --

COMMISSIONER FLEMING: It's still --

MR. GARY JONES [ORS]: -- just don't --

COMMISSIONER FLEMING: -- within that, but it's --

MR. GARY JONES [ORS]: Yes.

COMMISSIONER FLEMING: -- making it tight.

MR. GARY JONES [ORS]: Yes, it's very tight.

COMMISSIONER FLEMING: Because, I mean, the most important part of a facility like this is the personnel and being adequately trained -- is what I'm asking.

MR. GARY JONES [ORS]: It's a very important aspect of the plant, and they have to be trained, certified, and ready to operate the plant once it's turned over.

COMMISSIONER FLEMING: And do you know how the training is going with the personnel that have been

hired at this point?

MR. GARY JONES [ORS]: Yeah, the training classes are ongoing right now. I'm trying to remember -- I don't remember exactly the phase of training that they're in, but we review this with the -- we have the training people come in periodically and give us an updated status on where they are in their training cycle. There's training -- there's a crew of operators going through their training right now, and it's not too long before the first group is going to take the NRC certification, the first step of that initial certification exam.

COMMISSIONER FLEMING: And what is ORS's involvement with that, I mean, as far as checks and balances?

MR. GARY JONES [ORS]: Well, I mean, we review the -- we review with the operations people their training, how many operators they have going through the cycle, what the schedule is for completing that cycle, what their staffing is, how many they've hired. We review the overall hiring plan and the performance to that plan, periodically, also, with the people on site.

COMMISSIONER FLEMING: And going back to --

well, you had said that this is a global marketplace as far as vendors for this goes. And, I mean, there are nuclear plants; I know France is on the forefront of building nuclear plants, even though this is -- it's been a long time since the United States has built new nuclear facilities. So, obviously, that expertise has to be out there. Is the -- for these modules, is Lake Charles, is it the selection of that particular venue that's causing the challenge?

MR. GARY JONES [ORS]: I think, you know, one of the things that's happening -- and I should say that one of the approaches on the project is to look at outsourcing modules to other facilities. CB&I is very actively doing that. And, in fact, as we mentioned, CA03 has been outsourced to, actually, a South Carolina company, Pegasus Steel, and they, in fact, are going to build one of the sub-modules on site -- CA04. The pieces have been shipped from Lake Charles to the site; the site is actually going to build that sub-module on site and then construct the modules for it.

So, they are looking at -- and they have outsourced to nuclear news -- "nuclear news" -- Newport News Industrial, also, the shield building.

So that's one of the recovery things that they're looking at. But, also, the Lake Charles facility is a huge manufacturing facility, and it has a lot of state-of-the-art equipment and that kind of stuff. So if they can get that up and running the way it's supposed to, it should be an asset. But they are evaluating other venues, and if Lake Charles can't come into play, they're going to have to outsource to other -- there are other facilities available that can do this.

COMMISSIONER FLEMING: Well, that -- I mean, if that is what is holding back reaching the milestones and there's other availability, that was the point of my question.

MR. GARY JONES [ORS]: Of course, you've got to understand --

COMMISSIONER FLEMING: Because it's critical to the project.

MR. GARY JONES [ORS]: You've got to understand that just transferring them doesn't accelerate the schedule. The whole process of getting someone else up to speed and doing this, there's penalties involved there also. So you've got to be judicious in what you do. And that's being evaluated. But it is one of the options that

they're looking at. And, in fact, it may be pursued more vigorously on Unit 3 because there's more time involved, so there may be additional outsourcing relative to the Unit 3 modules. That's being looked at now.

COMMISSIONER FLEMING: So, are you feeling cautiously optimistic that Lake Charles facility will meet the standard?

MR. GARY JONES [ORS]: Yes, ma'am. "Cautiously optimistic" is a good phrase. I guess I can say I have more confidence in CB&I than I did in Shaw. And I think that that change was a good change, and I think ultimately it's probably going to help the project.

COMMISSIONER FLEMING: Okay.

MS. ALLYN POWELL [ORS]: Commissioner, you had asked about the operator training, and I had an answer for you on that. There are 24 students in the initial licensed-operator class, and there are 18 students in a nonlicensed-operator training program right now.

COMMISSIONER FLEMING: And what is the total number that they are hoping to have?

MS. ALLYN POWELL [ORS]: I don't have the total number with me.

COMMISSIONER FLEMING: Okay.

MS. ALLYN POWELL [ORS]: Sorry.

COMMISSIONER FLEMING: So they're kind of just in the beginning phases of the training process.

MS. ALLYN POWELL [ORS]: Yes.

COMMISSIONER FLEMING: Okay, thank you.

CHAIRMAN HAMILTON: Thank you. Commissioners? Commissioner Whitfield.

COMMISSIONER WHITFIELD: Thank you, Mr. Chairman.

Thank you, Ms. Powell, and Mr. Jones -- and Mr. Scott, too -- for this presentation and coming before us, and we welcome you back in this matter.

I've got a few questions for you. I think a lot of them have been answered, but I do have a few questions. I guess maybe first for you, Mr. Jones, back to the structural modules. And I don't have it written down in front of me right what the company said, but from recollection what I remember, there were problems with the documentation and the paperwork coming out of SMS Lake Charles, Louisiana, and there's also the actual weld problems that Commissioner Howard discussed with you. Could you share with us a little bit more maybe which way -- I know that the

company officials have visited the site down there, and they are getting, as you say, cautiously optimistic, and they seem to be -- the last couple of shipments have been ahead of schedule, I think they reported. But you're looking for sustained early delivery; you're looking for sustained improvement and consistency. And I guess if you could share maybe with us what portion is the actual documentation and paperwork issue, what portion are technical issues that you're trying to overcome with what's happening at SMS?

MR. GARY JONES [ORS]: I can't really give you statistics on what the division is between the two. I can tell you that some of the improvements that have been made since CB&I came into place relative to documentation. One of the things they've gone to now is actually an electronic tracking process. They've instituted that on the shop floor, where the documentation is filled out and filed electronically, so that it's done immediately and more accurately than fooling around with the paper on the shop floor. So that's one of the changes they've made.

They made a lot of changes to the management, how the shop flow work effort goes to the processes

that they change.

I don't have any statistics on how many are held due to paperwork, how many are held due to actual repair issues. But one of the things we do know is that the module that is currently being worked at the site is module CA20. Currently, all of the sub-modules associated with CA20 are being worked or are on the shipping dock at the Lake Charles facility. So they've got to do the final fabrication work and clear the paperwork on that CA20 module, and there are 72 sub-modules involved in that, and I think there's 40 -- I think there's 50 on site now, because it was 48, then they got -- no. It's 48. They're getting two more probably this week.

So there is evidence of movement through the shop now, and progress through the shop. They've actually started work on the next priority, which is CA01 module, so those are being moved into the shop. But all the ones associated with the Unit 2 CA20 modules are now either in final fabrication or in the process of final inspection and getting ready for shipping.

COMMISSIONER WHITFIELD: I think the CA20s were what was discussed with us recently, in our

most recent ex parte with the company.

So you, like you said to Commissioner Fleming, you do feel CB&I has been -- that's been a big positive change, and you concur with the company that you've seen -- albeit very recently -- you do see significant improvements; you just want to see long-term consistency in those on-time deliveries or ahead-of-schedule deliveries from Lake Charles.

MR. GARY JONES [ORS]: Yes, sir. And not just the deliveries but the quality also. That's an important aspect, too, that they're not just delivering but that the quality is there and that the modules don't go on hold, don't have to be reworked. So it's two aspects, both the on-time delivery and the quality.

COMMISSIONER WHITFIELD: You mentioned, of course -- I know that seems to be our focus today, is in Louisiana. And you mentioned, of course, everything being fabricated in a global market, but does ORS -- or has, can, or does ORS ever intend to go to the site like the company officials have? Does ORS -- since so much is being done there on site, have you been there or do you intend to go there, to inspect any of these sites and the work being done there?

MS. ALLYN POWELL [ORS]: We have not been on site to inspect CB&I or any of the other sites. I would need some direction from management before we would decide to do that.

COMMISSIONER WHITFIELD: And that leads to my next question a little bit. You touched on the shield building modules being given to Newport News Industrial in Newport News, Virginia. If you could, we didn't go into it in a lot of detail in your initial briefing, but if you could maybe quickly tell us -- again, recap for me, if you could, what challenges you see with those modules at Newport News, of the shield building.

MR. GARY JONES [ORS]: As I mentioned, the shield building modules are even more complex. Most of the modules for the structural modules are -- if you want to think of them as -- are square. The modules for the shield building are arcked; it's going to be a circular building. So the whole configuration of -- of -- essentially, you're making an arc segment. And within that, because this building has to withstand an aircraft crash, which is one of the major loads that's put on the structure, the sophistication of how the connections are made between the two plates --

basically -- these modules are basically two steel plates tied together with shear bars and then with reinforcing bar sticking out -- thousands of reinforcing bars sticking out -- that will be filled with concrete once they are put in place at the site. But some of -- and the configurations and transitions where the connections are made to the building are very complex structural connections: threaded connections with bolt -- nuts that have to be in place. And just the whole configuration gets very complex. You can imagine an arc surface tying into a square surface, how that connection is made, what you have to have to get the strength that you need -- there's gusset plates involved that reinforce these. So my concern is that these are even more complex than the shield building, and the welding involved is more difficult to do and just more complex.

There is optimism, because Newport News is a major fabricator of nuclear submarines, and they use round surfaces and plates and very constricted dimensions for what they have to work with. So they are a very good nuclear contractor, but again, I think what we're going to have to see is sustained, reliable performance from them, also.

And the primary concern now is that we just haven't seen any come -- none have been scheduled to come on site yet. They actually start being erected after a lot of the shield building -- I'm sorry -- a lot of the structural modules are in place; then the shield building starts.

So it's a concern. We haven't seen the instances of lack of compliance during their fabrication processes, and the preparation work associated with NNI -- getting the procedures in place, getting their quality assurance programs in place, all of the things they have to do before they start fabrication, their procurement cycles relative to where they buy the equipment that they need for it -- we haven't seen all those problems that we did see at the Lake Charles facility, so there is, like I say, cautious optimism.

COMMISSIONER WHITFIELD: Encouragement.

MR. GARY JONES [ORS]: Yeah.

MS. ALLYN POWELL [ORS]: I would just like to add to what Gary said. The shield building modules are a concern to the Nuclear Regulatory Commission, as well. They've required mockups of the shield building walls to test how the concrete pours between them and other things. So they are very

complicated, and Gary is right, that is something we're watching very closely.

COMMISSIONER WHITFIELD: Well, thank you for that discussion of the shield building work being done at Newport News Industrial, in Newport News.

And lastly -- or, actually, I've got two more things, but one more thing about the milestones. And I'm not going to go back into all of them, but that one that's now tracking at a 17-month delay, I believe Ms. Powell said, beyond 16 months, that ORS reported it or was very concerned -- I think was the word she used. Relative to the others, what are you doing to kind of stay on top of that one that seems like the most -- the one in the most danger of going outside of the Base Load Review Act?

MS. ALLYN POWELL [ORS]: Well, it definitely is, and we just got that information that it was delayed 17 months, on Monday. So I guess we are trying to formulate more of a review plan. That milestone moved significantly when the schedule was updated, and that's partially due to the resequencing. So, as part of our schedule discussion with Westinghouse and the company, we're looking to see why that happened, and, you know,

what other factors are there. Is it all due to the resequencing? Is some of it due to the fact that it was moved to a different manufacturer? We're still in the process of going through that.

So I don't have a lot of answers for you right now, because we just found out ourselves and it's something that we're working on.

COMMISSIONER WHITFIELD: Mr. Chairman, could we get maybe a report or something, a follow-up with them later on that, possibly, when they do know more?

CHAIRMAN HAMILTON: I'm sure that they'd be happy to provide that as soon as they have the information.

MS. ALLYN POWELL [ORS]: We would be happy to do that.

COMMISSIONER WHITFIELD: Thank you, Ms. Powell. And lastly, to kind of, I guess, go on two positives. Of course, the continuous 52-hour pour was, naturally, a huge milestone. And also the cooling towers, which Ms. Powell showed again, are at their actual height, and not having to build the 550-foot traditional cooling towers, I would think, would be a big, big plus for us here with these units. And if you could comment on -- I know that

was part of the original schedule and milestones, but obviously you've got to look at those certainly as being positives.

MS. ALLYN POWELL [ORS]: Definitely.

COMMISSIONER WHITFIELD: Thank you, Mr. Chairman.

CHAIRMAN HAMILTON: Thank you. Commissioner Hall.

VICE CHAIRMAN HALL: Thank you, sir. Thank you, Mr. Chairman.

Good morning. I wanted to ask, are any of the V.C. Summer modules being delayed because of delays in manufacturing modules for the Georgia plants? How closely related is the Vogtle schedule to our schedule?

MS. ALLYN POWELL [ORS]: Vogtle was originally supposed to be the lead plant. The two plants are now tracking approximately --

VICE CHAIRMAN HALL: About the same?

MS. ALLYN POWELL [ORS]: -- at the same time.

I've asked that question myself, and the reply that I got was Vogtle doesn't have a significant additional number of modules to V.C. Summer. And, in fact, they've taken sort of a different approach to getting modules delivered on site. Where V.C.

Summer is asking -- well, CB&I Lake Charles now -- to try to resolve a lot of the issues before they ship the modules, Vogtle is -- my understanding is Vogtle is taking shipment and then trying to resolve the issues later. And so it's kind of a different approach, but both are in the shop at the same time. Both were planned to be in the shop at the same times, so it's not a case of one versus the other.

VICE CHAIRMAN HALL: Okay. I also wanted to ask you, you said you have a definite schedule for Unit 2, but Unit 3, not yet. When can we expect a schedule for Unit 3?

MS. ALLYN POWELL [ORS]: I asked the company that question, and they said they were anticipating the new Unit 3 schedule within three months.

VICE CHAIRMAN HALL: Three months of -- okay.

MS. ALLYN POWELL [ORS]: They have sort of an 18-month look-ahead construction schedule to keep them on track, for now, and then a full schedule in three months.

VICE CHAIRMAN HALL: Three months. All right, thank you. Thank you, Mr. Chairman.

CHAIRMAN HAMILTON: Thank you. All right.

Just a couple of questions. On the challenges

that we've mentioned today that stand in front of us, I think some of these -- and you can correct me, but I think the NRC, the design change, has made many changes since we first started this project early on, that have brought about probably some of the challenges that we have today. And I think early on we were told about quality control problems by the company, and they told us that they were sending people on site to make sure that it met the quality that was required for safety with the nuclear plant. And I think the Shaw acquisition probably has brought about some of these milestones. Is there anything outside of these things that have caused challenges, that we need to be aware of?

MR. GARY JONES [ORS]: I mean, not all of the challenges that we reviewed are tied with Lake Charles.

CHAIRMAN HAMILTON: I know. I don't mean just Lake Charles, but I know quality control, early on, was a tremendous problem.

MR. GARY JONES [ORS]: Yeah. I mean, the whole issue relative to the component manufacturers, that ties into the whole quality control issue. That is one of the aspects that is

a concern, that, in fact, are you getting the requisite quality from these global vendors.

CHAIRMAN HAMILTON: Yeah.

MR. GARY JONES [ORS]: Do they comply with the necessary quality assurance requirements and quality control requirements that they need to, so --

CHAIRMAN HAMILTON: Yeah.

MR. GARY JONES [ORS]: -- we're not aware of any specific beyond that, but as a general topic, it will remain an issue that needs to be looked at.

CHAIRMAN HAMILTON: I understand. I know at the last ex parte with the company, I believe it was Mr. Byrne was very optimistic about the changes that they had seen at Lake Charles, and that they had actually people -- SCE&G people -- on the floor there with the employees. And they were under the thought that a great deal of the problem there was a morale problem, that they probably had too many chiefs, too many supervisors, and nobody expected to do it. So, you know, I don't know what the Base Load Review Act allows you two to do, but it might be wise to look at it and see if some on-site visits could be made, as Commissioner Whitfield mentioned. I think it would broaden your view of

actually what has happened. I think that Mr. Scott probably could review the bill. I think he's pretty well familiar with it anyway. But I think those things would probably help all of us.

I think today has been an excellent exchange between ORS and the Commission. I think most of the questions that we wanted to ask, I can't think of one that we haven't asked. But I do appreciate you doing it, and I think we have already -- in discussions with staff -- decided that we would do this at least on a semiannual basis, if we could, Mr. Scott.

MR. SCOTT: I think that would be excellent, and maybe even if we come up with concerns -- like milestones getting close to the 17 or 18 months -- maybe we could ask to come back to address you earlier. But every six months, at a minimum, would be very helpful. It's been very helpful to us to hear your questions and see where you're concerned. But if we can get -- if they'll let us in this facility, we will have somebody there to check it out, absolutely. And as we hear your questions, we will know better next time maybe what to expect that's on your minds, so we can be sure we've got the precise responses. This, is, I think, our

first crack at this.

But we appreciate the opportunity. We hope it was as beneficial to you as it was to us, to be able to do it, to come share this information. And from your questions, I see how conscientious -- and I knew that was going to be, anyway -- and the approach you're going to take, and the communication that -- I mean, filing some report in a few months is one thing, but coming and being able to have this exchange, to us, is a wonderful opportunity, and we sure appreciate it.

CHAIRMAN HAMILTON: We appreciate you coming, Mr. Scott. We certainly do, and we look forward to a continuation in the future. And if there's nothing else to come before --

COMMISSIONER HOWARD: Mr. Chairman?

CHAIRMAN HAMILTON: Yes, sir, Commissioner Howard.

COMMISSIONER HOWARD: Could you find out when the second-quarter report will be out?

MR. SCOTT: Yes. We know that, don't we?

MS. ALLYN POWELL [ORS]: It will be out 45 days after the end of the quarter, so around August 15th, depending on whether that falls on a weekend.

MR. SCOTT: What date would that be?

MS. ALLYN POWELL [ORS]: It will be around August 15th that the company's second-quarter report will be out.

MR. SCOTT: And then we'll reply -- put our reply on after that?

MS. ALLYN POWELL [ORS]: Yeah. Our reply typically takes about 45 days because we audit those documents pretty closely.

COMMISSIONER HOWARD: And, Mr. Scott, if you deem it necessary for a PSC member to go on a tour with you, I'll volunteer for Italy.

MR. SCOTT: I gotcha.

CHAIRMAN HAMILTON: I believe that won't happen.

[Laughter]

MR. SCOTT: Anywhere we go, you're welcome to go.

CHAIRMAN HAMILTON: All right. Thank you, very much. We appreciate, again, you being with us today. I think the exchange was great. And if there's no other business to come before the Commission, we stand adjourned.

[WHEREUPON, the proceedings in the above-entitled matter were adjourned.]

C E R T I F I C A T E

I, Jo Elizabeth M. Wheat, CVR-CM/M-GNSC, do hereby certify that the foregoing is, to the best of my skill and ability, a true and correct transcript of all the proceedings had in a Commission Meeting held by THE PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA in Columbia, South Carolina, on July 10, 2013.

Given under my hand this 6th day of August, 2013.

Jo Elizabeth M. Wheat, CVR-CM/M-GNSC
Court Reporter